

Amendments to the Specification:

Please replace the paragraph on **Page 1, lines 8-11** with the following amended paragraph:

This invention relates to a method for fabricating a semiconductor device, and more particularly to a method for fabricating thin film semiconductor devices wherein the growth substrate is removed by a reactive ion etch.

Please replace the paragraph on **Page 12, lines 3-17** with the following amended paragraph:

The method 10 can be used in fabricating many different semiconductor devices having epitaxial layers made of many different materials with many different thicknesses. The method 10 is particularly adapted to growing high quality thin film Group-III nitride layers used in RCLEDs, which have mirrors on the opposing sides of the thin films. When forming a Group-III nitride RCLED it is impractical to provide a mirror on the interface between the SiC substrate epitaxial layer because mirrors either have no recognizable monocrystalline structure or they are monocrystalline with a significantly different sized crystal lattice than that formed by epitaxial layers. As a result, it is difficult to fabricate high quality thin Group-III nitride layers on a mirror surface because of the mismatch in crystal structures.

Please replace the paragraph on **Page 13, lines 3-21** with the following amended paragraph:

FIG. 2 shows one embodiment of a RCLED 30 according to the present invention that is fabricated using the method 10, with the RCLED 30 shown at one of the intermediate steps in the method 10. The RCLED 30 comprises a silicon carbide substrate 32 that is used to anchor the epitaxial growth and has a first substrate surface 34 upon which the epitaxial growth nucleates. The first substrate surface 34 then becomes the interface between silicon carbide substrate 32 and epitaxial device structure 36. In this embodiment epitaxial structure 36 comprises an n-type GaN layer 38 that is grown directly on silicon carbide substrate 32 and a p-type GaN layer 40 that is grown on top of n-type layer 38. In other embodiments, an active region can be included between the n-type and p-type layers. The RCLED 30 further comprises a first mirror 42 that is deposited on the exposed surface of p-type epitaxial layer ~~[[32]]~~ 40. The RCLED 10 is shown as it could appear after step 16 in method 10 of FIG. 1.

Please replace the paragraph on **Page 14, lines 3-24** with the following amended paragraph:

FIG. 4 shows another embodiment of a RCLED 60 also having many of the same layers as RCLED 30, but wherein the first mirror 62 is a DBR as described above in method 10. DBR first mirror 62 can be made of many different layer pairs having different thicknesses and different indexes of refraction, with the DBR first mirror 62 preferably made of alternating dielectric layers of quarter wavelength thicknesses p-type silicon dioxide 64 and p-type titanium oxide 66. Another

embodiment of the DBR first mirror 62 according to the present invention comprises alternating dielectric layers of silicon dioxide and tantalum pentoxide. The contrast in indexes of refraction between device structure 36 made of GaN and layers 64, 66 that form DBR first mirror 62 is sufficient that the DBR first mirror ~~[[42]]~~ 62 effectively reflects light with two to four alternating layer pairs, with a suitable number of alternating layer pairs being three, although a DBR first mirror 62 with fewer or more pairs can also be used. The thickness of these layers corresponds to a quarter wavelength of light generated by the epitaxial device structure 36 when a bias is applied across the n-type and p-type layers 38, 40.

Please replace the paragraph on **Page 18, lines 24-31** to **Page 19, lines 1-2** with the following amended paragraph:

Although current spreading is not so much of a concern for n-type Group-III nitride materials, current spreading structure can also be included in the second mirror layer. FIGs. 15 and 16 show an embodiment of an RCLED 140 according to the present invention wherein the second mirror layer 142 comprises an n-type DBR 144 with a metal mesh 146 that is similar to the DBR 84 and metal mesh 86 described above and shown in FIGs. 6 and 7, with the metal mesh ~~[[86]]~~ 146 providing for good current spreading throughout the n-type epitaxial layer 38.

Please replace the sentence on **Page 19, lines 3-14** with the following amended sentence:

FIGS. 17-20 show different embodiments of an RCLED according to the present invention that can be fabricated using the method 10 in FIG. 1. In each of the RCLEDs shown, the first mirror layer can be any of the metal mirror deposition, the p-type DBR, or the p-type epitaxial DBR. Similarly, in each of the RCLEDs ~~[[that]]~~ the second mirror layer can be an n-type metal mirror, n-type DBR, or n-type epitaxial DBR. In these figures the selection of the second mirror layer is not constrained by the selection of the first mirror layer and vice versa. For example, second mirror layer can be an n-type metal mirror when first mirror layer is a p-type DBR.